

IN "CLEAN" FORM

sub B3
A1
3. (Amended) An authenticity feature for detection using a sensor as claimed in claim 1, wherein, in order to identify the signet on a document, the signet is equipped, at least in subregions, with a pigment which can be detected using the up-conversion effect.

4. (Amended) An authenticity feature for detection using a sensor as claimed in claim 1, wherein the signet can be detected as a fluorescent authenticity feature, using the down-conversion effect.

5. (Amended) An authenticity feature for detection using a sensor as claimed in claim 1, wherein the signet is excited, as a fluorescent authenticity feature, at a specific wavelength, and responds at the same wavelength.

sub B4
6. (Amended) The authenticity feature for detection using a sensor as claimed in claim 6, wherein the pigments are added directly to an applied solution, to an applied paint, to the adhesive or to the paper.

A2
7. (Amended) The sensor as claimed in claim 7, wherein position-resolved detection is carried out in the transport direction.

sub B5
8. (Amended) The sensor as claimed in claim 8, wherein the sensor is in the form of a two-band sensor, in which the test object is illuminated once and in which two different spectral bands are evaluated.

10. (Amended) The sensor as claimed in claim 9, wherein the sensor is in the form of a UV luminescence sensor, in which the test object is illuminated with UV light (for example using a UV LED at a wavelength of 370 nm), and wherein the luminescence signal is detected in a different spectral band.

11. (Amended) The sensor as claimed in claim 10, wherein an additional object detector (optical barrier) is used, which indicates to the sensor when the object (signet) starts and when it ends.

12. (Amended) The sensor as claimed in claim 11, wherein pigments having a fast rise time and a fast decay time (for example typically 0.1 m/s) are used.

13. (Amended) The sensor as claimed in claim 12, wherein a laser wavelength of 980 ± 10 nm is used for excitation.

14. (Amended) The sensor as claimed in claim 12, wherein a laser wavelength of 850 ± 10 nm is used for excitation.

15. (Amended) The sensor as claimed in claim 14, wherein the laser line produced using cylindrical lenses has an illumination intensity whose maximum occurs at the center of the line.

16. (Amended) The sensor as claimed claim 15, wherein the laser line is produced using an aspherical cylindrical lens.

17. (Amended) The sensor as claimed in claim 15, wherein the laser line is produced using a sinusoidal lens surface.

18. (Amended) The sensor as claimed in claim 15, wherein, in order to compensate for the sensitivity variation of the receiver, the illumination intensity of the laser line is increased slightly at the edge of the laser line.

19. (Amended) The sensor as claimed claim 18, wherein a reflection cone is arranged in front of the electronic evaluation unit for beam intensification which is in the form of a funnel-shaped or cylindrical hollow body having a metallically coated surface on the inside, or is in the form of a transparent funnel-shaped or cylindrical solid body.

20. (Amended) The sensor as claimed in claim 19, wherein a photo multiplier having a detection surface roughly in the form of a point and whose surface corresponds approximately to the outlet surface of the reflection cone is arranged immediately behind the reflection cone.

21. (Amended) The sensor as claimed claim 20, wherein only a portion of the scanning line is in each case imaged on the receiver via a respective lens, with these different imaged parts of the scanning line overlapping one another.

22. (Amended) The sensor as claimed in claim 21, wherein the lenses are arranged as a stack, resting closely against one another, at the window of the housing.

23. (Amended) The sensor as claimed in claim 21, wherein the light from each lens is passed through a respective reflection cone and falls on a respective receiver [(18)].

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24. (Amended) The sensor as claimed in claim 23, wherein the transmitting and receiving beams are joined together via a dichroic beam splitter, and leave the sensor housing together.

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